

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An image forming apparatus comprising:
 - a main body of the image forming apparatus;
 - a reversing automatic document feeder that is provided on an upper part of the main body of the image forming apparatus;
 - a wireless LAN module that is provided inside a rear surface of the main body of the image forming apparatus;
 - two antennas that are provided on the rear surface of the main body of the image forming apparatus;
 - an antenna for Bluetooth, which is disposed between the two antennas, with a first predetermined distance from a first of two antennas and a second predetermined distance from a second of the two antennas, and
 - a cable that connects the wireless LAN module and the two antennas with a shortest distance,
 - wherein the two antennas are disposed at positions where the first of the two antennas compensates for degradation in radiation characteristics of the second of the two antennas caused by the reversing automatic document feeder, and
 - wherein an uppermost part of the two antennas is provided at a position higher than a position that is lower by a third predetermined distance than an uppermost part of the reversing automatic document feeder,
 - wherein the two antennas are comprised of vertically oriented flat plates, and
 - wherein first parts of the two antennas that are disposed above second parts of the two antennas where the two antennas are mounted on the rear surface of the image forming apparatus, are separately formed from the rear surface of the image forming apparatus.

2. (Original). The image forming apparatus according to claim 1, wherein the wireless LAN module is provided on a control board that is disposed inside the rear surface of the main body of the image forming apparatus.

3. (Previously Presented) The image forming apparatus according to claim 1, wherein the two antennas respectively comprise a main antenna and a sub-antenna.

4. (Previously Presented) The image forming apparatus according to claim 1, wherein the two antennas each comprise a dual-band antenna.

5. (Withdrawn) An image forming apparatus with an automatic document feeder, comprising: a wireless LAN module that is provided inside a rear surface of a main body of the image forming apparatus; and an uppermost part of an antenna that is connected to the wireless LAN module and is provided on the rear surface of the main body of the image forming apparatus, the uppermost part of the antenna being located at a position higher than a predetermined position relative to an uppermost part of the automatic document feeder.

6. (Withdrawn) The image forming apparatus according to claim 5, wherein the uppermost part of the antenna is located at a position higher than a position that is lower by 1 cm than the uppermost part of the automatic document feeder.

7. (Withdrawn) An image forming apparatus with an automatic document feeder, comprising: a wireless LAN module that is provided inside a rear surface of a main body of the image forming apparatus; a main antenna that is connected to the wireless LAN module and is provided on the rear surface of the main body of the image forming apparatus, the main antenna being located at a position where optimal radiation characteristics are obtained in consideration of the presence of the automatic document feeder that is an obstacle to a front side of the image forming apparatus; and a sub-antenna that is connected to the wireless LAN module and is provided on the rear surface of the main body of the image forming apparatus.

8. (Withdrawn) The image forming apparatus according to claim 7, wherein an uppermost part of the main antenna is provided on that part of the rear surface of the image forming apparatus, which corresponds to a right side of the front surface of the image forming apparatus, at a position that is lower by 1 cm than an uppermost part of the automatic document feeder.

9. (Withdrawn) The image forming apparatus according to claim 7, wherein the sub-antenna is provided at such a position as to compensate a degraded portion of radiation characteristics of the main antenna.

10. (Withdrawn) The image forming apparatus according to claim 7, wherein an uppermost part of the sub-antenna is provided on that part of the rear surface of the image forming apparatus, which corresponds to a left side of the front surface of the image forming apparatus, at a position that is lower by 1 cm than an uppermost part of the automatic document feeder.

11. (Withdrawn) The image forming apparatus according to claim 7, further comprising an antenna for Bluetooth, which is disposed between the main antenna and the sub-antenna, with a predetermined distance from the main antenna and a predetermined distance from the sub-antenna.

12. (Withdrawn) The image forming apparatus according to claim 11, wherein the antenna for Bluetooth is disposed with a distance of 200 mm or more from the main antenna and with a distance of 200 mm or more from the sub-antenna.

13. (Previously Presented) The image forming apparatus according to claim 1, wherein the rear surface of the main body is perpendicular to a ground surface upon which the image forming apparatus sits.

14. (Previously Presented) The image forming apparatus according to claim 1, wherein the radiation characteristics are horizontal radiation characteristics.

15. (Previously Presented) The image forming apparatus according to claim 14, wherein the two antennas are respectively arranged on left and right sides of the rear surface of the main body of the image forming apparatus.

16. (Previously Presented) The image forming apparatus according to claim 1, wherein the third predetermined distance is 1 cm.

17. (Currently Amended) The image forming apparatus according to claim 1, wherein the uppermost part of the two antennas is provided at a position ~~between~~ higher than the uppermost part of the reversing automatic document feeder and the uppermost part of the reversing automatic document feeder, and wherein the first parts of the two antennas have a curved lower portion and a non-curved upper portion.

18. (Currently Amended) The image forming apparatus according to claim 16, wherein the uppermost part of the two antennas is provided at a position ~~between~~ higher than the uppermost part of the reversing automatic document feeder and the uppermost part of the reversing automatic document feeder, and wherein the first parts of the two antennas have a curved lower portion and a non-curved upper portion.

19. (Previously Presented) The image forming apparatus according to claim 1, wherein the antenna for Bluetooth is disposed with a distance of 200 mm or more from the first of the two antennas and with a distance of 200 mm or more from the second of the two antennas.